

|   | M PTO   | 0-1390 U.S. DEPARTMENT C  | OF COMMERCE PATENT AND TRADEMARK OFFICE          | ATTORNEY'S DOCKET NUMBER 3260-27             |  |  |  |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|--|--|--|--|--|
| TRANSMITTAL LETTER TO THE UNITED STATES  U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) |   |   |  |  |  |  |  |  |  |  |  |  |  |
| DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371                |   |   |  |  |  |  |  |  |  |  |  |  |  |
| INT   | ERNA  | TIONAL APPLICATION NO.  | INTERNATIONAL FILING DATE                        | PRIORITY DATE CLAIMED                        |  |  |  |  |  |  |  |  |  |
|   |   | PCT/KR02/00617  | 9 April 2002                                     |  |  |  |  |  |  |  |  |  |  |
| TIT   | TITLE OF INVENTION  |   |  |  |  |  |  |  |  |  |  |  |  |
|   | STABILIZED BIOCATALYSTS AND METHODS OF BIOCONVERSION USING THE SAME   |   |  |  |  |  |  |  |  |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US  KWON et al   |   |   |  |  |  |  |  |  |  |  |  |  |  |
| App   | Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: |   |  |  |  |  |  |  |  |  |  |  |  |
| 1.  | $\boxtimes$   | This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.   |  |  |  |  |  |  |  |  |  |  |  |
| 2.  |   | This is a SECOND or SUBS  | SEQUENT submission of items concerning a fil     | ing under 35 U.S.C. 371.                     |  |  |  |  |  |  |  |  |  |
| 3.  | $\boxtimes$   | This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.   |  |  |  |  |  |  |  |  |  |  |  |
| 4.  |   | The U.S. has been elected   | by the expiration of 19 months from the priority | date (Article 31).                           |  |  |  |  |  |  |  |  |  |
| 5.  | A co  | opy of the International Applic   | ation as filed (35 U.S.C. 371(c)(2)).            |  |  |  |  |  |  |  |  |  |  |
|   | a.  | is attached hereto (59 pages specification, claims & abstract (56 claims), 12 sheets drawings).   |  |  |  |  |  |  |  |  |  |  |  |
|   | b.  | A has been communicate  | ed by the International Bureau.                  |  |  |  |  |  |  |  |  |  |  |
|   | c.  | is not required, as the application was filed in the United States Receiving Office (RO/US).  |  |  |  |  |  |  |  |  |  |  |  |
| 6.  |   | An English language transla   | ation  |  |  |  |  |  |  |  |  |  |  |
|   | a.<br>abst  | of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto ( pages specification, claims & stract ( claims), sheets drawings, page Certificate of Translation).   |  |  |  |  |  |  |  |  |  |  |  |
|   | b.  | of the annexes of the I   | nternational Preliminary Examination Report ur   | nder PCT Article 36 (35 U.S.C. § 371(c)(5)). |  |  |  |  |  |  |  |  |  |
| 7.  |   | Amendments to the claims of   | of the International Application under PCT Artic | ele 19 (35 U.S.C. 371(c)(3))                 |  |  |  |  |  |  |  |  |  |
| η   | a.  | are attached hereto (required only if not communicated by the International Bureau).  |  |  |  |  |  |  |  |  |  |  |  |
|   | b.  | have been communicated by the International Bureau.   |  |  |  |  |  |  |  |  |  |  |  |
| •   | c.  | have not been made; however, the time limit for making such amendments has <b>NOT</b> expired.  |  |  |  |  |  |  |  |  |  |  |  |
|   | d.  | have not been made a  | nd will not be made.                             |  |  |  |  |  |  |  |  |  |  |
| 8.  |   | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).   |  |  |  |  |  |  |  |  |  |  |  |
| 9.  | a.  | An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).  |  |  |  |  |  |  |  |  |  |  |  |
|   | b.<br>Forn  | Declaration was submitted to the International Bureau during International Phase (see copies of Declaration ( page rm PCT/RO/101 and Form PCT/IB/371 and first page of printed publication acknowledging receipt thereof attached). |  |  |  |  |  |  |  |  |  |  |  |
| 10.   |   | e item 6.b. above.<br>ms 11 To 20 below concern document(s) or information included:  |  |  |  |  |  |  |  |  |  |  |  |
| 11.   |   | An Information Disclosure S   | tatement under 37 C.F.R. 1.97 and 1.98.          |  |  |  |  |  |  |  |  |  |  |
| 12.   |   | An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.  |  |  |  |  |  |  |  |  |  |  |  |
| 13.   | $\boxtimes$   | A FIRST preliminary amendment.  |  |  |  |  |  |  |  |  |  |  |  |
| 14.   |   | A SECOND or SUBSEQUENT preliminary amendment.   |  |  |  |  |  |  |  |  |  |  |  |
| 15.   |   | A substitute specification.   |  |  |  |  |  |  |  |  |  |  |  |
| 16.   |   | A change of power of attorney and/or address letter.  |  |  |  |  |  |  |  |  |  |  |  |
| 17  |   | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825.  |  |  |  |  |  |  |  |  |  |  |  |
| 18.   |   | A second copy of the published international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |  |  |  |
| 19.   |   | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |  |  |  |
| 20.   | $\boxtimes$   | Other items or information. International Search Report & PTO-1449 Form; copy of cited WO and Isticato references   |  |  |  |  |  |  |  |  |  |  |  |

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| U.S. APPLICATION HOLES  | Unassigned PCT/KR02/00617   |  |                       |                              | 3260-27 |                       |          |          |  |  |  |  |
|---|---|--|-----------------------|------------------------------|---------|-----------------------|----------|----------|--|--|--|--|
|   |   |  |                       | 1                            | C/      | ALCULATIONS           | PTO      | JSE ONLY |  |  |  |  |
|   | 21. A The following fees are submitted:  BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5): |  |                       |                              |         |                       |          |          |  |  |  |  |
| Neither internati<br>nor internationa<br>and Internationa   |   |  |                       | -                            |         |                       |          |          |  |  |  |  |
| International pre<br>USPTO but Inte   | 950.00  |  |                       |                              |         |                       |          |          |  |  |  |  |
| International pre-<br>but internationa  |   |  |                       |                              |         |                       |          |          |  |  |  |  |
| International pre-<br>but all claims die  |   |  |                       |                              |         |                       |          |          |  |  |  |  |
| International pre<br>and all claims s   |   |  |                       |                              |         |                       |          |          |  |  |  |  |
|   |   | ENTER APPROPRIAT   |                       | MOUNT =                      | \$      | 950.00                |          |          |  |  |  |  |
| Surcharge of \$130.00 months from the earlie  | for furnishing the oath or s<br>st claimed priority date (3                             | declaration later than 20<br>37 C.F.R. 1.492(e)).        |                       |                              | \$      | 130.00                |          |          |  |  |  |  |
| CLAIMS  | NUMBER FILED  | NUMBER EXTRA   | RATI                  |                              |         | 222.02                |          |          |  |  |  |  |
| Total Claims  | 40 minus 20   | <del></del>  |                       | 18.00                        | \$      | 360.00                |          |          |  |  |  |  |
| Independent Claims  | 2 minus 3   |  |                       | 00.88                        | _       | 0.00                  |          |          |  |  |  |  |
| MULTIPLE DEPENDE  | NT CLAIMS(S) (if applica  | able)  | \$300.0               |                              | \$      | 300.00                |          |          |  |  |  |  |
| Petition is hereby mad  | e to extend the current du<br>10/1 month; \$430.00/2 mo                                 | ue date so as to cover the fi                            | ing date of this p    | paper and                    | \$      | 0.00                  |          |          |  |  |  |  |
| attachment(s) (\$110.0  | 0/ 1 HIOHIII, \$430.00/2 HIO  | TOTAL OF A   | BOVE CALCUL           | ATIONS =                     | \$      | 1740.00               |          |          |  |  |  |  |
| Applicant claims  | small entity status. See 3  | 37 CFR 1.27. The fees indi                               |                       |                              |         |                       |          |          |  |  |  |  |
| are reduced by 1  |   | •  |                       |                              |         | 870.00                |          |          |  |  |  |  |
|   |   |  |                       | BTOTAL =                     | \$      | 870.00                |          |          |  |  |  |  |
| Processing fee of \$130   | ).00, for furnishing the En<br>st claimed priority date (3                              | nglish Translation later than                            | □ 20 □ 30             |                              |         | 0.00                  |          |          |  |  |  |  |
| months from the eather  | st claimed phonty date (o   | 01 0.1 .11. 1.402(1)).                                   | TOTAL NATION          | IAL FEE =                    | \$      | 870.00                |          |          |  |  |  |  |
| Fee for recording the e   | enclosed assignment (37   | C.F.R. 1.21(h)). The assign                              | ment must be          |                              |         |                       |          |          |  |  |  |  |
| accompanied by an ap  | propriate cover sheet (37   | 7 C.F.R. 3.28, 3.31). <b>\$40.0</b> 0                    | per property          | +                            | \$      | 0.00                  | <u> </u> |          |  |  |  |  |
| Fee for Petition to Rev   | = \$685.00)<br>CLOSED =   | \$   | 0.00<br><b>870.00</b> | <u> </u>                     |         |                       |          |          |  |  |  |  |
|   | LUSED =   | <u> </u>   | mount to be:          | $\vdash$                     |         |                       |          |          |  |  |  |  |
|   |   |  |                       |                              | l       | refunded              | \$       |          |  |  |  |  |
|   |   |  |                       |                              | Charged |                       | \$       |          |  |  |  |  |
| <ul> <li>a.  A check in the amount of \$870.00 to cover the above fees is enclosed.</li> <li>b.  Please charge my Deposit Account No. 14-1140 in the amount of \$ to cover the above fees.  A duplicate copy of this form is enclosed.</li> </ul> |   |  |                       |                              |         |                       |          |          |  |  |  |  |
| overnavmen  | t to Deposit Account No.  | 14-1140. A duplicate copy                                | of this form is er    | nclosed.                     |         |                       |          |          |  |  |  |  |
| d. 🔯 The entire c   | ontent of International Ap  | plication No. PCT/KR02/00                                | 617 and any U.S       | <ol><li>and foreig</li></ol> | n a     | pplication(s) co      | rresp    | onding   |  |  |  |  |
| thereto, and , re   | ferred to in this applicatio  | on is/are hereby incorporated                            | d by reference in     | this applica                 | ation   | 1.<br>to revive (37 ( | FR       | 1 137(a) |  |  |  |  |
| NOTE: Where an app  | propriate time limit unde   | er 37 C.F.R. 1.494 or 1.495<br>he application to pending | status.               | net, a petiti                | UII     | to levive (57 C       | /.I .II. | 1.107(a) |  |  |  |  |
| CORRESPONDENCE  | ADDRESS   | inc application to ponums                                |                       |                              |         |                       |          |          |  |  |  |  |
| Direct all correspon  |   |  |                       |                              | _       |                       |          |          |  |  |  |  |
|   |   |  |                       | Customer                     | İ       |                       |          |          |  |  |  |  |
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|   |   | Type Customer Number                                     |                       | l Here →                     |         |                       |          |          |  |  |  |  |
|   | L   |  |                       |                              |         |                       |          |          |  |  |  |  |
| , ·   |   |  | *                     | Turo                         | L       | n                     |          |          |  |  |  |  |
| <br>  Telephone: (703) 816-   |   |  |                       |                              |         |                       |          |          |  |  |  |  |
| BJS:pp  |   |  |                       |                              |         |                       |          |          |  |  |  |  |
|   |   | October 12, 2004   |                       |                              |         |                       |          |          |  |  |  |  |
|   | BER Date  |  |                       |                              |         |                       |          |          |  |  |  |  |